Airport Problems of the Airlines

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In considering the relationship between airport and airline management, it should be remembered that the airlines comprise only one classification of users of our major airports. Many people lose sight of this fact—sometimes even airport operators when considering sources of revenues for maintenance and operation of such facilities. The fact is that private and corporate aircraft and military planes take up a substantial percentage of the capacity of many of our airports. Records of the Air Transport Association show that on 180 of our busiest civil airports, the air carriers account for only about 30 per cent of the total operations. This percentage, of course, varies substantially as between airports.

It must be admitted, however, that the requirements of the scheduled airlines, to a large extent, govern the minimum needs in essential airport features, e.g., length and strength of runways. In the main, any airport which meets airline requirements will serve the corporate and private aircraft operator and, to a large extent, the military as well.

Airline interest in airports logically divides into two major classifications: (a) layout of landing and terminal areas and related facilities, and (b) economics affecting airline use of these facilities.

Since this paper is intended to deal mainly with the second classification, I will mention only a few of the physical problems.

RUNWAYS, TERMINALS AND OTHER FACILITIES

From the brick and mortar standpoint, there is no doubt but that increases in the use of air transportation and the size and efficiency of transport airplanes, have been much more rapid than improvements in the airports on which they are dependent. This has resulted in a continuing pressure for increases in size of airports and airport facilities, to permit the improved aircraft to provide the traveling and shipping public with the maximum service of which these planes are capable, and to produce a favorable economic result for the operator.

Parenthetically, the facilities problems and expense resulting from the rapid expansion in volume of air transportation are not confined to airport management but are shared by the carriers as well. In many cases in the last few years, the airlines have found it necessary to replace hangars and other buildings long before they were written off the books due to larger new airplanes which could not be handled in hangars built a few years earlier. This applies not only to hangars...
but to working space for airline operations personnel and to loading equipment.

Runway lengths, of course, come first in the consideration of physical requirements. In this respect, some of our major airports are deficient for today's airplanes—not to speak of the jets, which are only three or four years away. The busiest airport in the world—Chicago Midway—is sub-standard for some of the planes now in regular use by the airlines—the DC-7, the Stratocruiser, and the Super Constellation. In some cases, payload must be cut as much as 4,000 pounds for these heavy aircraft operating non-stop to Pacific Coast points. Four thousand pounds is the equivalent of 20 passengers—a loss which affects revenues to the extent of over $1.00 per mile and which can well mean the difference between a good operation and a poor one, economically speaking. I don't think anyone can say with too much assurance just what runway lengths will be needed for the jetliners being ordered today. But it is safe to assume that many of today's airports will require substantial improvements to permit utilization of the maximum capabilities of the oncoming jets. Certainly, airports which are to accommodate these Queen Marys of the air should have no less than 8,000 foot runways, at sea level, which should be capable of expansion to at least 10,000 feet if future developments require.

While runway lengths (and strengths) are, without a doubt, the most important single airport ground facility affecting efficient utilization of the capabilities of present and soon-to-be-operated aircraft, there are many other physical features which have a bearing on the problem. For example, there are such things as elimination of intersecting runway patterns, more effective taxiways to eliminate the necessity for taxiing on runways, high speed taxi turnoffs to clear runways quickly for other movements.

Design of passenger and cargo terminals, too, has a substantial effect on the efficiency of airline operation.

Unfortunately, the airlines have not had much voice in the design of some of the existing terminals even though it would seem that, as major users, they should have a good deal of influence in the layout of such facilities. A part of their failure to do so can be charged to the airlines themselves, due to time required to get unanimity among the carriers as to what is required. A substantial part of the fault, however, has resulted from the desire of some municipalities to build monumental terminals, in the creation of which requirements for efficient airline operation were sometimes relegated to a subordinate position.

Fortunately, in the most recently constructed terminals, the airlines have been given more opportunity to make suggestions. Perhaps one of the most outstanding examples of cooperation between the airlines and the airport owner is O'Hare International Airport at Chicago. From the very beginning of the project, the City and the airlines have worked closely together in all phases of the construction.
Committees of airline engineers and other technical people have been given access to the planning of the City and have been encouraged to offer suggestions, many of which have been accepted.

USER CHARGES AT AIRPORTS

Any differences of opinion on technical design matters between municipal airport owners and the airlines have been mild as compared with their opposing points of view on the question of payment by the airlines of flight fees and other charges for the use of the airport and its facilities.

To understand fully the reason for this conflict in views, it is necessary to go back to the early days of air transportation when municipalities would “go all out” to obtain airline service. In many cases, in those early days, the airlines were charged little or nothing for the use of municipally owned airports. Hangars were furnished virtually rent-free and many other similar inducements were made to get airline service.

Much of the progress in the early lean days of air transportation can be credited to this constructive attitude held by many of the municipalities. As a result, the airlines understandably grew up with the philosophy that an airport is a facility for all the public, such as a harbor; that a part of the cost should be borne by public funds and not all be paid by users of the facility. A good argument can be made for such point of view, for which there have been ample precedents in waterway and harbor developments.

On the other side, municipalities have been faced with a severe airport problem arising from the accelerated growth of air transportation since World War II and a consequent need for more and better airports. Noting the fact that the airlines have produced profits, even though relatively modest ones, in the last few years, it is understandable that municipal managements feel an airport should pay its way and not be supported in part by municipal funds.

This conflict in philosophies has resulted in some protracted negotiations between airlines and municipalities. In a few instances it has been almost a case of an irresistible force meeting an immovable object, such as the Idlewild case where agreement was reached, after years of futile negotiation, only by the intervention of the Governor of the State of New York through the medium of an all-night session in a New York City hotel.

In addition to the basic problem of the amounts to be paid by the airlines for airport use, several collateral problems, closely allied with the basic one, have arisen in the last few years.

“Public Utility” Theory

A novel one, which was put forward by Corporation Counsel for the City of Chicago, relates to the so-called “public utility” theory under which the contention has been made that it is not lawful for
municipal authorities to make binding agreements covering airport user charges for a definite period of time; but that such charges must be fixed from time to time in the light of operating costs. Obviously such a proposition is distasteful to the airlines since, if valid, they could not enter into airport agreements with any assurance that they would remain effective for the specified term, which would make it difficult to justify the huge capital investments for hangars and other facilities which have to be made by the airlines at their major terminals. And, of course, it would affect the validity of existing agreements, some of which have many years to run. Fortunately, for the airlines' peace of mind, this principle recently was tested in the California Courts, which handed down a decision that municipalities do have authority to enter into long term airport agreements which, once made, are valid for the specified term. In addition, the Illinois Legislature at its last session clarified the power of Illinois municipalities to enter into long term airport agreements.

**Gallonage Charges**

Basically, it is the practice for airline contributions to the cost of airport operation to be made in the form of flight fees of a specified amount per landing or per thousand pounds of landing weight, plus, of course, rent for land for the erection of airline buildings (hangars, etc.) and payments for space in municipally owned terminals or other buildings on the airport. The principle of the flight fee charge is obviously an equitable one provided the rate is in proper relation to airline use of the airport. Some airport operators, however, in recent years have attempted, in addition, to assess a charge of so much for each gallon of the carrier's fuel pumped into its airplanes on the airport. This may sound like a minor item, but the airlines burn a lot of gasoline in a year. For example, United Air Lines last year used over 170 million gallons, so it can readily be seen that a charge of, say one cent a gallon—not the highest which has been proposed—amounts to a substantial sum of money. I think most carriers will agree that the cost of operating a fuel system is a legitimate part of the cost of airport operation, which must be met by the users. But a gallonage charge which bears no relation to cost of operation of the fuel system would seem to be no more nor no less than another fuel tax. Not the least of its defects is that it penalizes the long haul operator who must fill up his tanks at point of origin. Likewise, it results in avoiding fueling to the extent operationally feasible, at airports where such a charge is made.

**Concession Revenue**

Fortunately there has been growing appreciation of the necessity of designing airports and airport terminals so as to develop the maximum amount of revenue from sources other than the people who fly airplanes into and out of airports. Automobile parking areas, fixed
base operations for servicing non-scheduled aircraft, restaurants, bars and other concessions will, if properly developed, make a major contribution to the cost of airport operation with consequent reduction in the net cost. As an outstanding example, 1955 revenue from concessions at the Willow Run Airport in Detroit amounted to about 70% of the cost of operating the airport.

**Capital Funds for Airport Construction**

Until a few years ago, it was taken for granted that capital funds for the construction of airports and related facilities would come from general municipal funds, supplemented by Government grants in aid and in some cases by State appropriations. Recently, however, the pressing need for airport improvements coupled with tremendous increases in need for funds for other vital municipal facilities, such as streets, sewers, schools, etc. have brought forward the idea of obtaining capital funds for airports through the device of issuing revenue bonds, secured by revenues received from payments for the use of facilities constructed with the proceeds of the bonds. So far, very little airport financing has been done by this method but unquestionably there will be more in the future. This again will pose a problem for the air carrier users of the airports, from the standpoint of their ability to enter into term agreements for airport user charges, since it is doubtful whether such revenue bonds would be saleable without a guarantee that rates would be maintained at a level which would provide for servicing the debt. This being true, it would seem that the air carriers must have a substantial voice in the determination of the need for facilities which are to be built from the proceeds of revenue bonds.

**Airline Operation of Airports**

Because of the problems, actual and potential, associated with their use of municipally-managed airports, the airlines have intermittently given thought to the desirability of leasing or owning airports and operating them through airline-owned corporations created for this purpose. One such experiment has been tried at Willow Run Airport, Detroit, Michigan, and the results have been good—in fact excellent. Through the initiative of the management, concession revenue has been developed to a point where the flight fees paid by the airlines are the lowest in the country for any comparable airport. In this case no large capital expenditures were required since the airport is owned by the University of Michigan and is leased by the airline corporation. Normally, however, such a method of operation would require the airlines either to lease the airport from the owning municipality or to raise the capital to build it. It is probable that the political and financial problems involved will slow up developments in this direction, although the Willow Run experience would certainly indicate that the plan has merit.
Chicago's O'Hare International Airport

The most recent major airport agreement is the one executed last fall by the City of Chicago and the airlines serving the City. Previously I have ventured the opinion that the O'Hare project is an outstanding example of cooperation between the airlines and a municipality. From the inception of the planning for O'Hare, between 8 and 9 years ago, the airlines were given every opportunity to participate in the project. In 1946 a so-called Chicago Airlines Top Committee was formed, made up of a representative from each of the airlines serving Chicago. Sub-committees were established to deal with specific phases of the problem, including a Technical Committee, to work with the City on construction planning, and a Flight Operations Committee to keep an eye on pertinent details of the project.

These Committees, with relatively few changes in personnel, have worked closely with the City on all engineering and flight phases of the program. Over the years there naturally have been many changes in details of the project. In all these, the airlines have been given an opportunity to voice their opinions and make suggestions.

I don't mean to imply that there were no snags. There were many—some minor and one or two major, one of which resulted in the suspension of construction for several months. But in the larger view, I think the airlines were given all possible cooperation by the City in the design of the O'Hare facilities.

In 1950 a Negotiating Sub-committee was formed to work out an agreement with the City covering the rights and obligations of the parties and payment of user charges by the airlines. In the negotiations which culminated in the agreement signed last fall, both parties had the benefit of past experience and up-to-date thinking on the relationship between the airlines and airport management. All the problems to which I have referred, and many others, were brought into the picture. The City wanted what the airlines considered to be a very high flight fee; they wanted it to apply to takeoff weight rather than landing weight, and they wanted a guaranteed minimum payment. Further, the City wanted to assess a gallonage charge on fuel. There was a wide difference of opinion on the term of the agreement.

The fifteen-year agreement which finally came out of the prolonged negotiations contains some new principles. Its major premise is that the City does not expect to make a profit from the airport but that users of the facility will meet the net cost of the City of running the airport so that general funds of the City will not be called on to pay a part of the cost.

Briefly, the basic points in the agreement are as follows:

Each year the flight fee, in cents per thousand pounds of CAA approved maximum landing weight, is derived by dividing the "Adjusted Net Airport Expense" for the previous year by the number
of thousands of pounds landed in that year. The resulting quotient becomes the rate per thousand pounds of approved landing weight for the ensuing calendar year. Provision is made for carrying forward to each year any deficits or excess payments from the preceding year. To get started on this method of payment, the rate for the period beginning on the date of the agreement (October 1, 1955) and ending June 30, 1957 is fixed at an arbitrary figure per thousand pounds, with a guarantee by the airlines that payments for their landings plus landings of others not parties to the agreement will amount to not less than $480,000.

The contract provides specifically for expenses to be included in the "Adjusted Net Airport Expense" which is the dividend in the formula outlined above. This, of course, includes all cost of operating and maintaining the airport, including direct costs, administrative expenses of the City in connection with the airport, depreciation on depreciable assets acquired by the City with funds other than Grants in Aid from Federal or State Government, and interest on funds (again other than Government Grants in Aid) invested by the City in capital expenditures (including acquisition of land, moving a railroad and relocation of highways).

From the total derived as above is subtracted all revenues received by the City from other than air carriers. This includes concession revenue, revenue from fixed base operators, flight fees from landings by aircraft other than those owned by the airlines parties to the agreement, etc. The amount left after this subtraction, adjusted up or down for deficits or excess payments in the preceding year, is the "Adjusted Net Airport Expense," which, when divided by the number of thousands of pounds of approved maximum landing weight by the airline parties to the agreement, gives the flight fee per thousand pounds.

One interesting provision relates to revenue bonds. If the airlines agree to the terms of any revenue bond issue, then all servicing of such debt shall be included as a part of the airport expense used in the above-described formula. If they do not approve such bond issue, the amount included in the airport expense is limited to simple interest on funds obtained by the City from such bonds plus depreciation on depreciable assets acquired with such funds. This seems to be a logical provision in view of the fact that (a) the airlines are in effect agreeing to pay all net expense of operating the airport and (b) since the airlines are the major users of the airport, they should be more interested than anyone else in major improvements requiring the issue of revenue bonds.

So far as I know, this is the first case in which the airlines have, in effect, guaranteed the City against loss on the airport. The airlines' alternative probably would have been to agree to pay a very high landing charge which would have continued even if the volume of operations at O'Hare had increased to a point where airlines pay-
ments would have been substantially in excess of requirements. On the other hand the arrangement effectively relieves the City of Chicago from having to pay a part of the cost of operating the airport.

The danger to the airlines in such an arrangement arises, of course, from the fact that their payments are governed by the cost of an operation which they do not control and which is dependent on the efficiency of the City's airport management. Certain safeguards are included:

The agreement states that the airport expense shall not include any expenditure which is of a nature or amount "which would not have been incurred by a reasonably prudent operator of an airport." The City agrees that it will inform the airlines of any capital expenditures in excess of $50,000 (other than certain specified ones) proposed to be made by the City and will give consideration to any suggestions made by the airlines in regard thereto. The City agrees to keep such records as are required by generally accepted sound accounting practices and principles for determining all costs and revenues of the airport which affect the determination of flight fees to be paid by the airlines and a representative of the airlines shall have the right to examine and make copies of these records. And the City will furnish to the airlines each year, a copy of an audit report, prepared by a firm of independent accountants, covering the operation of the airport by the City.

As previously stated, this is believed to be a new conception of the relationship between the airlines and municipal airport management. To a substantial effect it is based on confidence of the parties in each other. Time alone will tell whether the principles of this agreement will work to the mutual advantage of both parties.